

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
SHERMAN DIVISION**

X-MOBILE TECHNOLOGIES LLC,

Plaintiff,

v.

MICROSOFT CORPORATION,

Defendant.

Civil Action No. 4:17-CV-704

**JURY TRIAL DEMANDED**

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**MICROSOFT'S RULE 12(B)(6) MOTION TO DISMISS**

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Pursuant to Federal Rule of Civil Procedure 12(b)(6), Defendant Microsoft Corporation (“Microsoft”) respectfully moves to dismiss Count II (alleged infringement of U.S. Patent No. 6,690,351 (“the ’351 patent”) (Ex. A)) in the First Amended Complaint (“Complaint”) of Plaintiff X-Mobile Technologies LLC (“X-Mobile”) (Dkt. 13) for failure to state a claim.

## I. INTRODUCTION

X-Mobile’s Complaint alleges that Microsoft infringes four patents. The Complaint fails to state a plausible claim for relief at least as to the ’351 patent because it is invalid on its face as a matter of law. Each claim of the ’351 patent recites the computer-implemented means-plus-function element “means to translate said data into computer commands to effect control and alteration of said computer system to coincide with any changes resulting from input of said sensor.” The specification, however, fails to disclose an algorithm for performing the claimed function, rendering the claims invalid as indefinite. *Triton Tech of Tx., LLC v. Nintendo of Am., Inc.*, 753 F.3d 1375, 1378 (Fed. Cir. 2014) (“Failure to disclose the corresponding algorithm for a computer-implemented means-plus-function term renders the claim indefinite.”).<sup>1</sup>

## II. BACKGROUND

### A. The Parties and the X-Mobile Litigation

X-Mobile, a recently-formed non-practicing entity, filed ten lawsuits in this Court asserting a total of four patents relating to wearable mobile computers.<sup>2</sup> In the present case, X-Mobile’s allegations against Microsoft include alleged infringement of the ’351 patent. (Dkt. 13, ¶¶ 6-74.)

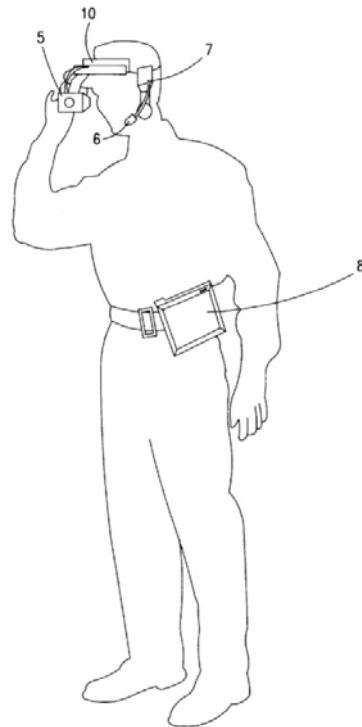
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<sup>1</sup> Microsoft will address the remaining allegations in the Complaint and Microsoft’s other defenses at the appropriate time. See Fed. R. Civ. P. 12(a)(4)(A).

<sup>2</sup> See case nos. 4:17-cv-00695 (in re Huawei entities), 4:17-cv-00696 (in re ZTE entities), 4:17-cv-00697 (in re Samsung entities), 4:17-cv-00698 (in re LGE entities), 4:17-cv-00699 (in re HTC Corporation), 4:17-cv-00700 (in re Lenovo Group), 4:17-cv-00701 (in re Sony entities), 4:17-cv-

## B. The '351 Patent

The '351 patent was filed nearly 18 years ago in April 2000, issued in February 2004, and is generally directed to a user-supported mobile computer system including a feature of optimizing display settings based on conditions (e.g., ambient temperature, noise, and light) using a sensor. (See, e.g., Ex. A at Abstract, 1:3-6, 1:48-52, 3:50-4:3.) Figure 3 shows an example of the user-supported computer system being worn by a user.



**FIG. 3**

(Ex. A at Fig. 3.)

## 1. The written description of the claimed invention

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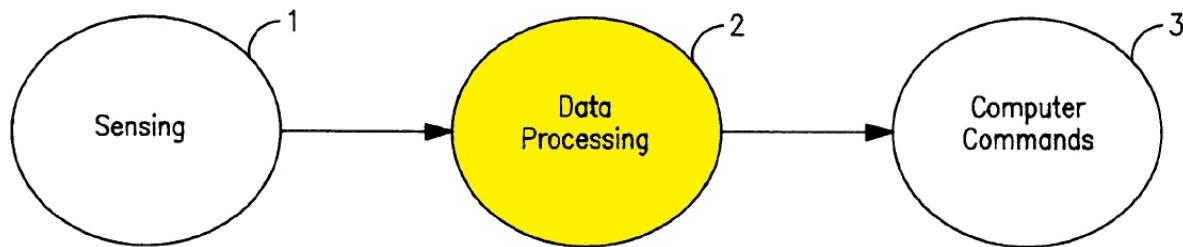
00702 (in re Apple Inc.), 4:17-cv-00703 (in re Amazon.com entities), case 4:17-cv-00704 (in re Microsoft Corporation).

The '351 patent admits that the underlying technologies used by the purported invention were known in the prior art. The patent admits that "it is known in the computer art to provide some display optimizing or enhancing means to various computer systems." (Ex. A at 1:57-58.) It also admits that existing computers could adjust "the output of the display" using the "known reflectivity characteristics of the glass and inside coatings of the front glass plate" and provide "automatic contrast control." (*Id.* at 2:7-11, 2:20-21.) It further admits that existing devices already "automatically adjust[] the brightness of a display" based on "ambient lighting conditions of the environment" and use ambient light sensors to control internal device settings such as power. (*Id.* at 2:35-63; 3:16-23.)

What is new, according to the patent, is some unidentified software programming and/or hardware logic to provide a mobile computer with a display that "automatically optimize[s] internal settings based on sensor information of its surrounding environment." (*Id.* at 1:49-52.) But the patent does not describe any new device or hardware that, without specialized programming, can achieve these complex computing results. Nor does it describe any specialized programming, system logic, or other algorithm that transforms a generic processor into a specific structure capable of performing the claimed "translate" function. Instead, it discloses only a black box—a generic capability for "Data Processing" (as shown in Figure 1) that is embodied in a generic "Data Processor" (as shown in Figure 2).

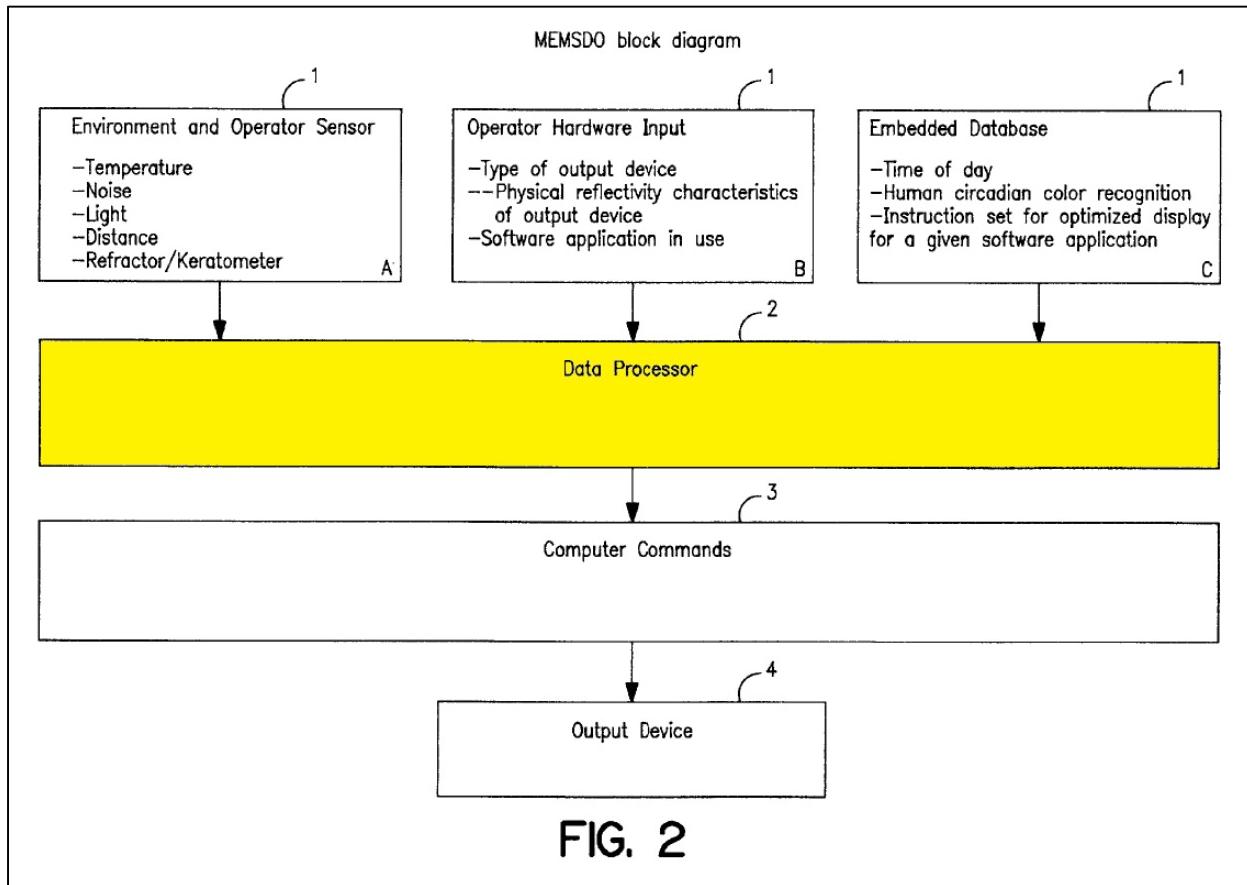
Figure 1, reproduced below, shows the high-level functional flow—information from a sensor is provided for data processing (highlighted), which outputs computer commands:

Basic MEMS Functional Architecture



**FIG. 1**

(*Id.* at Fig. 1 (highlighting added); *see also id.* at 7:21-32 (describing Figure 1).) Figure 2, reproduced below, shows the same functional flow through a set of featureless boxes including a “Data Processor” (highlighted) that outputs “Computer Commands.”



**FIG. 2**

(*Id.* at Fig. 2 (highlighting added); *see also id.* at 7:33-43 (describing Figure 2).) And Figures 3 and 4 illustrate a generic hands-free “computer system” worn by a user. (*Id.* at Figs. 3, 4.)

The patent’s “Detailed Description” of the preferred embodiments is barely one column long. (*Id.* at 7:19-8:43.) It identifies the generic “data processor” shown in Figure 2 (alternatively called “data processing unit 2”) as performing the function of translating sensor data into computer commands to control the display settings based on the sensor data. A sensor or hardware component “sends information on ambient conditions as well as user specific information to the data processing unit 2.” (*Id.* at 7:22-25.) Then, “[t]he data processing unit 2 translates this data into computer commands 3 to effect command level control of the display system to effect the changes resulting from the sensor 1 input.” (*Id.* at 7:22-28 (underlining added).) This sentence is the only use of the word “translate” in the patent’s short written description of the purported invention.

The specification does not describe any underlying technical detail about the data processor or its processing function, such as any specific hardware components or software configurations; it is merely a generic “data processor” or “data processing unit.” (*See id.*, 7:22-28, Fig. 2; *see also id.*, 7:57-62 (mentioning an alternative configuration for sensor subsystems and suggesting that “any suitable system may be used”).)

## 2. The claims of the ’351 patent

X-Mobile’s Complaint alleges that Microsoft has infringed at least claim 1 of the ’351 patent. (Dkt. 13, ¶ 34.) Claim 1 recites as follows, with underlining added:

1. A hands free user or operator supported mobile computer system comprising hands free, activating means, a processor and a display means, said processor in electrical connection to said display means, said mobile computer comprising at least one sensor for optimizing internal settings in said display when said sensor and said display

are in communication, means in said computer to receive information from said sensor and to transmit it to a data processing means, and means to translate said data into computer commands to effect control and alteration of said computer system to coincide with any changes resulting from input of said sensor wherein said sensor is enabled to at least measure conditions and optimize internal settings based upon environmental conditions and the type of the display means and reflectivity characteristics of a physical glass and coatings of the display means.

(Ex. A at claim 1 (emphasis added).) The claim element at issue in this motion is the “means to translate...” element underlined above. The remaining independent claims of the ’351 patent, claims 10 and 16, recite the same element.<sup>3</sup> (*Id.* at claims 10 and 16.)

### **III. COUNT II SHOULD BE DISMISSED BECAUSE THE ’351 PATENT IS INVALID**

#### **A. Legal Principles**

A count in a complaint should be dismissed where it fails to state a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6). In addition to dismissal due to deficient factual allegations, a count should be dismissed where it fails to state a claim “on the basis of a dispositive issue of law.” *Neitzke v. Williams*, 490 U.S. 319, 326-27 (1989). *See also Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (“the tenet that a court must accept as true all of the allegations contained in a complaint is inapplicable to legal conclusions”).

“[A]n invalid patent cannot be infringed.” *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S.Ct. 1920, 1929 (2015). Therefore, where, as here, a complaint alleges infringement of a patent that is invalid as a matter of law, the defective count should be dismissed. *See, e.g., In re TLI Commc’ns LLC Patent Litig.*, 87 F. Supp. 3d 773, 798-804 (E.D. Va. 2015) (noting indefiniteness is a question

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<sup>3</sup> Claim 10 contains the same element as claim 1, while claim 16 recites “alternation” instead of “alteration” which appears to be a typographical error that does not affect this motion.

of law and granting motion to dismiss where means-plus-function claims were invalid for indefiniteness due to lack of corresponding algorithm), *aff'd*, 823 F.3d 607 (Fed. Cir. 2016); *compare Content Extraction and Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1351 (Fed. Cir. 2014) (affirming grant of motion to dismiss because “the claims of [the] asserted patents are invalid as patent-ineligible under 35 U.S.C. § 101”); *Select Controls v. Am. Elec. Components, Inc.*, 2008 WL 216612, at \*2-5 (S.D.N.Y. Jan. 22, 2008) (granting motion to dismiss where “the Complaint and the exhibits attached thereto reveal unequivocally that the design covered by the ‘823 Patent . . . [is] invalid as a matter of law”). Courts grant motions to dismiss to dispose of facially invalid patents because such patents should be “exposed at the point of minimum expenditure of time and money by the parties and the court.” *See Uniloc USA, Inc. v. Rackspace Hosting, Inc.*, 18 F. Supp. 3d 831, 834 (E.D. Tex. 2013).

Invalidity for indefiniteness is a question of law, *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005), that can be decided “based solely on the language of the patent specification.” *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 927 (Fed. Cir. 2004).

#### **B. The '351 Patent Is Invalid for Indefiniteness**

The '351 patent is invalid on its face. Each claim of the patent recites a computer-implemented means-plus-function element for which there is no corresponding algorithm, rendering the claims indefinite as a matter of law.

The recited “means to translate said data into computer commands to effect control and alteration of said computer system to coincide with any changes resulting from input of said sensor” is a means-plus-function element because it recites the term “means” and does not recite structure that overcomes the presumption of means-plus-function treatment. *Advanced Ground Info. Sys., Inc. v. Life360, Inc.*, 830 F.3d 1341, 1347 (Fed. Cir. 2016).

The question, then, is whether this element satisfies the requirements imposed by 35 U.S.C. § 112, paragraph 6. The Patent Statute “incorporates a deliberate quid pro quo: the patentee is allowed to claim a limitation in broad functional language, provided that the specification indicates what structure constitutes the means for performing the claimed function.” *Dealerrtrack, Inc. v. Huber*, 674 F.3d 1315, 1328-29 (Fed. Cir. 2012). “Fulfillment of the § 112, ¶ 6 tradeoff cannot be satisfied when there is a total omission of structure. There must be structure in the specification.” *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999). *See also Greenberg v. Ethicon Endo-Surgery Inc.*, 91 F.3d 1580, 1582 (Fed. Cir. 1996) (“Congress permitted the use of purely functional language in claims, but it limited the breadth of such claim language by restricting its scope to the structure disclosed in the specification and equivalents thereof”); *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) (“The point of the requirement that the patentee disclose particular structure in the specification and that the scope of the patent claims be limited to that structure is to avoid pure functional claiming.”).

For computer-implemented functions, the structural requirement is more specific: the specification must “disclose an algorithm for performing the claimed function.” *Advanced Ground Info.*, 830 F.3d at 1349; *see also Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1370 (Fed. Cir. 2015) (“the structure for computer-implemented functions must be an algorithm.”).<sup>4</sup> As the Federal Circuit has explained: “For a patentee to claim a means for performing a particular function and then to disclose only a general purpose computer as the

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<sup>4</sup> The only narrow exception to this rule is where “the claimed function is ‘coextensive’ with a microprocessor itself,” which is not the case here. *EON Corp. IP Holdings LLC v. AT&T Mobility LLC*, 785 F.3d 616, 621-23 (Fed. Cir. 2015).

structure designed to perform that function amounts to pure functional claiming” that “does not limit the scope of the claim to ‘the corresponding structure, material, or acts’ that perform the function, as required by section 112 paragraph 6.” *Aristocrat*, 521 F.3d at 1333. To disclose the algorithm, the written description must sufficiently set forth “a step-by-step procedure for performing the claimed function.” *Triton*, 753 F.3d at 1378-79 (citing *Ergo Licensing LLC v. Care-Fusion 303, Inc.*, 673 F.3d 1361, 1363 (Fed. Cir. 2012)).

Consistent with these principles, the Federal Circuit and the district courts in this District have repeatedly held invalid computer-implemented means-plus-function claims where the specification does not sufficiently disclose corresponding algorithmic structure. *See, e.g., Function Media, LLC v. Google Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013) (affirming Eastern District of Texas district court indefiniteness ruling); *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008) (same); *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1383 (Fed. Cir. 2009) (same).

The ’351 patent specification does not disclose an algorithm “to translate said data into computer commands to effect control and alteration of said computer system to coincide with any changes resulting from input of said sensor.”

Instead, as discussed above and illustrated in Figures 1 and 2 of the patent, the specification identifies only a generic data processor that is somehow, through some unexplained underlying programming or logic, supposed to perform the function. A sensor or related hardware “sends information on ambient conditions as well as user specific information” to the data processor, and the data processor “translates this data into computer commands **3** to effect command level control of the display system to effect the changes resulting from the sensor **1** input.” (Ex.

A at 7:25-28; *see also* Fig. 2.) Information is input, an unspecified translation is performed, and computer commands are output.

The description of the “translate” function in the specification is thus, “at best, a description of the claimed function,” which is “not enough to transform the disclosure of a general-purpose microprocessor into the disclosure of sufficient structure.” *Aristocrat*, 521 F.3d at 1335. “This type of purely functional language which simply restates the function associated with the means-plus-function limitation, is insufficient to provide the required corresponding structure.” *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1317 (Fed. Cir. 2012). The generic data processor is nothing more than “a black box that performs a recited function. But how it does so is left undisclosed.” *Blackboard*, 574 F.3d at 1383.

Nothing else in the specification provides the required algorithmic structure for the “means to translate . . .” function. The specification contains various other statements regarding data processing, but none of them sets forth the required step-by-step procedure to perform the claimed function. For example, the specification states that “[t]he computer data processor 2 takes all the input data from the sensor 1 components A, B & C and calculates the optimal display setting and affects these settings on the display device 5” (Ex. A at 7:53-56) – this is merely a description of a function, and neither sets forth any particular calculations (or even any description of what types or classes of calculations might be performed), nor provides any step-by-step procedure that actually generates the computer commands. Similarly, the specification describes that “[t]he information compiled by the data processor 2 is used to generate specific computer commands to the output device 4 with the purpose of optimizing the viewability for the operator in a dynamic manner” (*id.* at 7:63-66) – again, this disclosure merely provides a high-level re-statement of the function, but does not disclose any step-by-step algorithm for generating the

computer commands that are output. The bare identification that a generic data processor performs a function is not enough to satisfy the statutory *quid pro quo*. *Function Media*, 708 F.3d at 1318 (“At most, the ’045 Patent specification discloses that the structure behind the function of transmitting is a computer program that transmits. Beyond the program’s function, however, no algorithm is disclosed.”). As a result, each claim of the ’351 patent is invalid as a matter of law. *Triton*, 753 F.3d at 1378-79.<sup>5</sup>

The failure to disclose the required algorithm is a dispositive defect that cannot be cured by expert testimony or other extrinsic evidence, making dismissal for indefiniteness appropriate here.<sup>6</sup> *In re TLI*, 87 F. Supp. 3d at 803; *EON*, 785 F.3d at 623-24 (“Where the specification discloses no algorithm, the skilled artisan’s knowledge is irrelevant.”); *see also Function Media*, 708 F.3d at 1319 (plaintiff “cannot rely on the knowledge of one skilled in the art to fill in the gaps”); *Noah*, 675 F.3d at 1318-19 (affirming district court that held claims indefinite for lack of algorithm and “refused to allow expert testimony or other evidence regarding what one skilled in the art would understand from the specification”).

#### **IV. CONCLUSION**

For the foregoing reasons, Count II of the Complaint as well as all claims for relief based on alleged willfulness and indirect infringement of the ’351 patent should be dismissed.

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<sup>5</sup> The Complaint also claims a right to relief based on purported willful and indirect infringement of the ’351 patent. (Dkt. 13, ¶¶70-74). Because the ’351 patent is invalid, these claims cannot survive, and should be dismissed along with Count II.

<sup>6</sup> The absence of an algorithm in the present case distinguishes it from other cases where this Court and other courts have declined to decide certain indefiniteness issues on a motion to dismiss prior to claim construction proceedings that may include extrinsic evidence. *See, e.g., Titanide Ventures, LLC v. Int’l Bus. Machs. Corp.*, No. 4:12-cv-196, 2012 WL 5507327, at \*2-3 (E.D. Tex. Oct. 18, 2012).

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Respectfully submitted,

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*Attorneys for Defendant Microsoft Corp.*

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on December 11, 2017.

*/s/ DeAnna Allen*  
DeAnna D. Allen